Purple Sea Urchin Sperm Cell Fertilization Test — Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	05-8570-6805	Endpoint:	Fertilization Rate	CETIS Version:	CETISv1.9.2
Analyzed:	24 Aug-18 14:37	Analysis:	Parametric-Control vs Treatments	Official Results:	Yes
Batch ID:	00-1837-2361	Test Type:	Fertilization	Analyst:	
Start Date:	25 Jul-18 15:01	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Laboratory Seawater
Ending Date:	25 Jul-18 15:41	Species:	Strongylocentrotus purpuratus	Brine:	Not Applicable
Duration:	40m	Source:	David Gutoff	Age:	
Sample ID:	03-2109-4622	Code:	AVA0718.225	Client:	E.S. Engineering -Avalon WWTP
Sample Date:	24 Jul-18 06:30	Material:	Sample Water	Project:	
Receipt Date:	25 Jul-18 10:30	Source:	Bioassay Report		
Sample Age:	33h (9.3 °C)	Station:	Eff Comp		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU	PMSD
Angular (Corrected)	C > T	6.6	> 6.6	n/a	15.15	4.23%

Dunnett Multiple Comparison Test

Control	vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision(α:5%)
Negative Control		0.41	-2.31	2.407	0.068	6	CDF	0.9997	Non-Significant Effect
		0.82	-0.951	2.407	0.068	6	CDF	0.9803	Non-Significant Effect
		1.64	-2.067	2.407	0.068	6	CDF	0.9993	Non-Significant Effect
		3.3	-2.31	2.407	0.068	6	CDF	0.9997	Non-Significant Effect
		6.6	-3.492	2.407	0.068	6	CDF	1.0000	Non-Significant Effect

Test Acceptability Criteria

		TAC Limits			
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	0.925	0.7	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.0233505	0.0046701	5	2.959	0.0403	Significant Effect
Error	0.0284132	0.0015785	18			
Total	0.0517637		23			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Bartlett Equality of Variance Test	7.054	15.09	0.2167	Equal Variances
Variances	Levene Equality of Variance Test	1.909	4.248	0.1427	Equal Variances
Variances	Mod Levene Equality of Variance Test	0.6747	4.248	0.6480	Equal Variances
Distribution	Anderson-Darling A2 Normality Test	0.5851	3.878	0.1312	Normal Distribution
Distribution	D'Agostino Kurtosis Test	2.117	2.576	0.0343	Normal Distribution
Distribution	D'Agostino Skewness Test	2.221	2.576	0.0263	Normal Distribution
Distribution	D'Agostino-Pearson K2 Omnibus Test	9.416	9.21	0.0090	Non-Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.1419	0.2056	0.2378	Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.9173	0.884	0.0509	Normal Distribution

Fertilization Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	0.9250	0.9091	0.9409	0.9300	0.9100	0.9300	0.0050	1.08%	0.00%
0.41		4	0.9550	0.9345	0.9755	0.9550	0.9400	0.9700	0.0065	1.35%	-3.24%
0.82		4	0.9350	0.8855	0.9845	0.9250	0.9100	0.9800	0.0156	3.33%	-1.08%
1.64		4	0.9525	0.9373	0.9677	0.9550	0.9400	0.9600	0.0048	1.01%	-2.97%
3.3		4	0.9550	0.9345	0.9755	0.9550	0.9400	0.9700	0.0065	1.35%	-3.24%
6.6		4	0.9675	0.9475	0.9875	0.9700	0.9500	0.9800	0.0063	1.30%	-4.59%

Purple Sea Urchin Sperm Cell Fertilization Test — Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 05-8570-6805 Endpoint: Fertilization Rate CETIS Version: CETISv1.9.2
Analyzed: 24 Aug-18 14:37 Analysis: Parametric-Control vs Treatments Official Results: Yes

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.294	1.264	1.323	1.303	1.266	1.303	0.009231	1.43%	0.00%
0.41		4	1.359	1.308	1.409	1.357	1.323	1.397	0.01579	2.32%	-5.02%
0.82		4	1.321	1.203	1.438	1.294	1.266	1.429	0.03691	5.59%	-2.07%
1.64		4	1.352	1.317	1.387	1.357	1.323	1.369	0.01109	1.64%	-4.49%
3.3		4	1.359	1.308	1.409	1.357	1.323	1.397	0.01579	2.32%	-5.02%
6.6		4	1.392	1.337	1.447	1.397	1.345	1.429	0.01729	2.48%	-7.58%

Fertilization Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	0.9300	0.9300	0.9100	0.9300
0.41		0.9400	0.9700	0.9600	0.9500
0.82		0.9100	0.9200	0.9800	0.9300
1.64		0.9500	0.9400	0.9600	0.9600
3.3		0.9600	0.9700	0.9500	0.9400
6.6		0.9800	0.9700	0.9700	0.9500

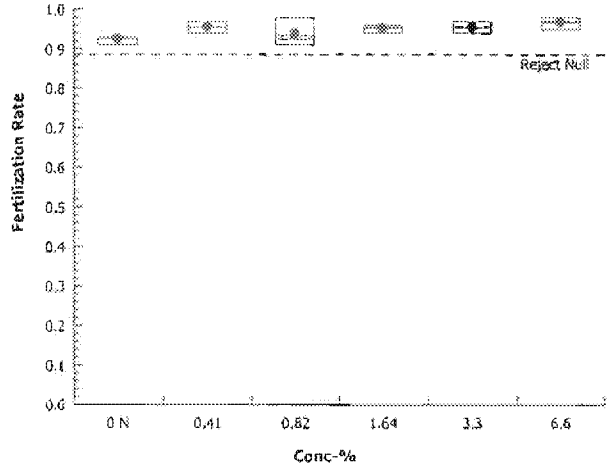
Angular (Corrected) Transformed Detail

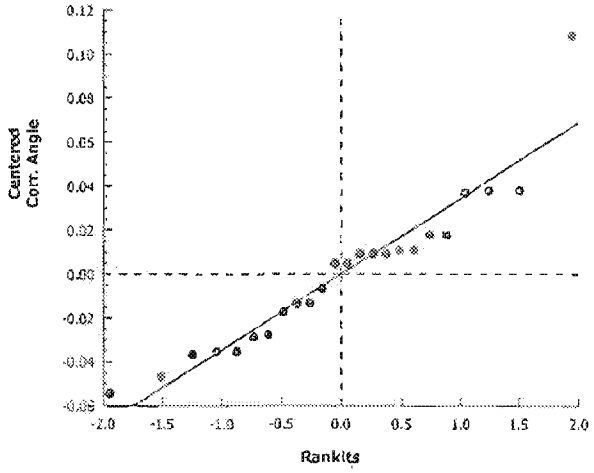
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.303	1.303	1.266	1.303
0.41		1.323	1.397	1.369	1.345
0.82		1.266	1.284	1.429	1.303
1.64		1.345	1.323	1.369	1.369
3.3		1.369	1.397	1.345	1.323
6.6		1.429	1.397	1.397	1.345

Fertilization Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	93/100	93/100	91/100	93/100
0.41		94/100	97/100	96/100	95/100
0.82		91/100	92/100	98/100	93/100
1.64		95/100	94/100	96/100	96/100
3.3		96/100	97/100	95/100	94/100
6.6		98/100	97/100	97/100	95/100

Graphics





Purple Sea Urchin Sperm Cell Fertilization Test — Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	00-0019-6369	Endpoint:	Fertilization Rate	CETIS Version:	CETISv1.9.2
Analyzed:	24 Aug-18 14:37	Analysis:	Linear Interpolation (ICPIN)	Official Results:	Yes
Batch ID:	00-1837-2361	Test Type:	Fertilization	Analyst:	
Start Date:	25 Jul-18 15:01	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Laboratory Seawater
Ending Date:	25 Jul-18 15:41	Species:	Strongylocentrotus purpuratus	Brine:	Not Applicable
Duration:	40m	Source:	David Gutoff	Age:	
Sample ID:	03-2109-4622	Code:	AVA0718.225	Client:	E.S. Engineering -Avalon WWTP
Sample Date:	24 Jul-18 06:30	Material:	Sample Water	Project:	
Receipt Date:	25 Jul-18 10:30	Source:	Bioassay Report		
Sample Age:	33h (9.3 °C)	Station:	Eff Comp		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	0	280	Yes	Two-Point Interpolation

Test Acceptability Criteria

		TAC Limits			
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	0.925	0.7	>>	Yes	Passes Criteria

Point Estimates

Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL
EC5	>6.6	n/a	n/a	<15.15	n/a	n/a
EC10	>6.6	n/a	n/a	<15.15	n/a	n/a
EC15	>6.6	n/a	n/a	<15.15	n/a	n/a
EC20	>6.6	n/a	n/a	<15.15	n/a	n/a
EC25	>6.6	n/a	n/a	<15.15	n/a	n/a
EC40	>6.6	n/a	n/a	<15.15	n/a	n/a
EC50	>6.6	n/a	n/a	<15.15	n/a	n/a

Fertilization Rate Summary

			Calculated Variate(A/B)								
Conc-%	Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	N	4	0.9250	0.9100	0.9300	0.0050	0.0100	1.08%	0.0%	370	400
0.41		4	0.9550	0.9400	0.9700	0.0065	0.0129	1.35%	-3.24%	382	400
0.82		4	0.9350	0.9100	0.9800	0.0156	0.0311	3.33%	-1.08%	374	400
1.64		4	0.9525	0.9400	0.9600	0.0048	0.0096	1.01%	-2.97%	381	400
3.3		4	0.9550	0.9400	0.9700	0.0065	0.0129	1.35%	-3.24%	382	400
6.6		4	0.9675	0.9500	0.9800	0.0063	0.0126	1.30%	-4.6%	387	400

Fertilization Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	0.9300	0.9300	0.9100	0.9300
0.41		0.9400	0.9700	0.9600	0.9500
0.82		0.9100	0.9200	0.9800	0.9300
1.64		0.9500	0.9400	0.9600	0.9600
3.3		0.9600	0.9700	0.9500	0.9400
6.6		0.9800	0.9700	0.9700	0.9500

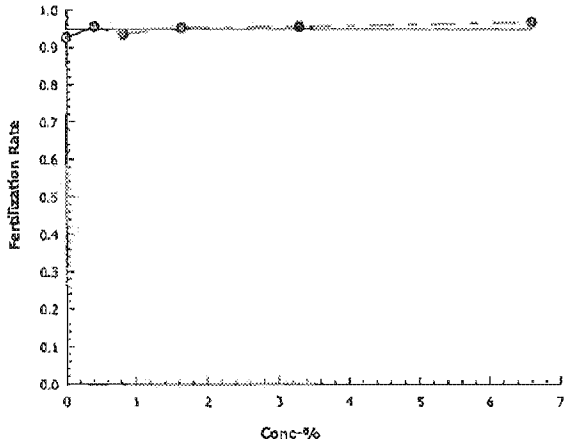
Fertilization Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	93/100	93/100	91/100	93/100
0.41		94/100	97/100	96/100	95/100
0.82		91/100	92/100	98/100	93/100
1.64		95/100	94/100	96/100	96/100
3.3		96/100	97/100	95/100	94/100
6.6		98/100	97/100	97/100	95/100

Purple Sea Urchin Sperm Cell Fertilization Test — Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	00-0019-6369	Endpoint:	Fertilization Rate	CETIS Version:	CETISv1.9.2
Analyzed:	24 Aug-18 14:37	Analysis:	Linear Interpolation (ICPIN)	Official Results:	Yes

Graphics



Purple Sea Urchin Sperm Cell Fertilization Test — Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	00-1837-2361	Test Type:	Fertilization	Analyst:	
Start Date:	25 Jul-18 15:01	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Laboratory Seawater
Ending Date:	25 Jul-18 15:41	Species:	Strongylocentrotus purpuratus	Brine:	Not Applicable
Duration:	40m	Source:	David Gutoff	Age:	

Sample ID:	03-2109-4622	Code:	AVA0718.225	Client:	E.S. Engineering -Avalon WWTP
Sample Date:	24 Jul-18 06:30	Material:	Sample Water	Project:	
Receipt Date:	25 Jul-18 10:30	Source:	Bioassay Report		
Sample Age:	33h (9.3 °C)	Station:	Eff Comp		

Parameter Acceptability Criteria

			TAC Limits			
Parameter	Min	Max	Lower	Upper	Overlap	Decision
Salinity	34	34	32	36	Yes	Passes Criteria
Temperature	14.8	14.9	11	13	Yes	Above Criteria

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	6.5	2.688	10.31	6.2	6.8	0.3	0.4243	6.53%	0
0.41		2	6.4	2.588	10.21	6.1	6.7	0.3	0.4243	6.63%	0
0.82		2	6.6	2.788	10.41	6.3	6.9	0.3	0.4243	6.43%	0
1.64		2	6.5	2.688	10.31	6.2	6.8	0.3	0.4243	6.53%	0
3.3		2	6.35	3.173	9.527	6.1	6.6	0.25	0.3536	5.57%	0
6.6		2	6.35	1.903	10.8	6	6.7	0.35	0.495	7.8%	0
Overall		12	6.45	6.241	6.659	6	6.9	0.09495	0.3289	5.10%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	7.9	7.884	7.916	7.9	7.9	0	0	0.0%	0
0.41		2	7.9	7.884	7.916	7.9	7.9	0	0	0.0%	0
0.82		2	7.9	7.884	7.916	7.9	7.9	0	0	0.0%	0
1.64		2	7.95	7.315	8.585	7.9	8	0.04999	0.0707	0.89%	0
3.3		2	7.95	7.315	8.585	7.9	8	0.04999	0.0707	0.89%	0
6.6		2	8.05	7.415	8.685	8	8.1	0.05001	0.07073	0.88%	0
Overall		12	7.942	7.899	7.984	7.9	8.1	0.0193	0.06686	0.84%	0 (0%)

Salinity-ppt

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	34	34	34	34	34	0	0	0.0%	0
0.41		2	34	34	34	34	34	0	0	0.0%	0
0.82		2	34	34	34	34	34	0	0	0.0%	0
1.64		2	34	34	34	34	34	0	0	0.0%	0
3.3		2	34	34	34	34	34	0	0	0.0%	0
6.6		2	34	34	34	34	34	0	0	0.0%	0
Overall		12	34	34	34	34	34	0	0	0.00%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
0.41		2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
0.82		2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
1.64		2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
3.3		2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
6.6		2	14.85	14.21	15.49	14.8	14.9	0.05004	0.07077	0.48%	0
Overall		12	14.85	14.82	14.88	14.8	14.9	0.01508	0.05222	0.35%	0 (0%)

Purple Sea Urchin Sperm Cell Fertilization Test			Aquatic Bioassay & Consulting Labs, Inc.
Dissolved Oxygen-mg/L			
Conc-%	**Code**	**1**	**2**
0	N	6.8	6.2
0.41		6.7	6.1
0.82		6.9	6.3
1.64		6.8	6.2
3.3		6.6	6.1
6.6		6.7	6
pH-Units			
Conc-%	**Code**	**1**	**2**
0	N	7.9	7.9
0.41		7.9	7.9
0.82		7.9	7.9
1.64		8	7.9
3.3		8	7.9
6.6		8.1	8
Salinity-ppt			
Conc-%	**Code**	**1**	**2**
0	N	34	34
0.41		34	34
0.82		34	34
1.64		34	34
3.3		34	34
6.6		34	34
Temperature-°C			
Conc-%	**Code**	**1**	**2**
0	N	14.8	14.9
0.41		14.8	14.9
0.82		14.8	14.9
1.64		14.8	14.9
3.3		14.8	14.9
6.6		14.8	14.9

CHAIN OF CUSTODY RECORD

Client: E.S. Engineering	**Project Name/Number:** AWWTP
Address 23 Pebbly Beach Rd Avalon CA. 90704 BOX 1810	**Project Mgr.** Ian Morison
Phone Number: (310) 510-0231	**P.O. #** 690-A
	Sampled By *(signature)* Ian Morison

Date	Time	Comp.	Grab	Matrix	Sample ID	Volume/ Number
7/24/18	0930	X		WW	Eff Comp	1/4L

Analysis

Chronic Toxicity	Comments
X	Return Blue Ice and Chest A.S.A.P.
	Temp. deg F = 93°C
	Chlorine (mg/L) = Lab
	NH3 (mg/L) = 2.0

Relinquished By: *(signature)* Ian Morison — Date: 7/24/18 Time: 14:30

Received By: *(signature)* — Date: 7-25-18 Time: 1030

Relinquished By: *(signature)* — Date: Time:

Received By: *(signature)* — Date: Time:

Temp. upon sample receipt: _____ °C

Aquatic Bioassay and Consulting Laboratories
29 N. Olive Street Ventura, CA 93001 Phone: (805) 643-5621 Fax: (805) 643-2930

STORM WATER POLLUTION PREVENTION PLAN AND MONITORING IMPLEMENTATION PLAN

Avalon Wastewater Treatment Facility
123 Pebbly Beach Road
Avalon, CA 90704
WDID No. 4 19I023146

Prepared by:

ES Engineering Services, L.L.C.
1 Park Plaza, #1000,
Irvine, CA 92614

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons that manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

Van Madding - Plant Manager
Revision Date: September 6, 2018

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X) STORM WATER POLLUTION PREVENTION PLAN

A. BACKGROUND

This Storm Water Pollution Prevention Plan and Monitoring Implementation Plan (hereafter referred to as a SWPPP) was created for the Avalon Wastewater Treatment Facility (AWTF), which is owned by the City of Avalon and operated by ES Engineering Services, L.L.C. (ES). The contents of this SWPPP are consistent with the guidelines of the California State Water Resources Control Board (SWRCB) *General Permit for Storm Water Discharges Associated with Industrial Activities* (Order 2014-0057-DWQ) and include facility runoff locations and descriptions, narratives of the facility processes, storm water pollution prevention techniques, and a monitoring program with reporting requirements. This SWPPP was originally created in June 29, 2015 and has been revised based on the parameter results for the reporting year 2017-2018.

A.1. Regulatory Background

Storm water at AWTF is managed in accordance with appropriate Federal and State Regulations including the Environmental Protection Agency, National Pollutant Discharge Elimination System (NPDES) requirements. In response to federal regulations promulgated in 1972 by the Water Pollution Control Act (also known as Clean Water Act), as amended in 1989 and codified as final regulations in 1990 in Title 40 of the Code of Federal Regulations, Part 122 (40 CFR 122), SWRCB elected to issue a statewide General Permit that would apply to all discharges covered under the new regulations, except municipal storm drain systems and storm water discharges from construction activities covered under separate statewide permits. The General Permit was initially issued in November 1991 under Water Quality Order No. 91-13-DWQ (Division of Water Quality). The monitoring requirements of the General Permit were amended in September 1992 by Order No. 92-12-DWQ.

SWRCB issued a revised General Permit under Order No. 97-03-DWQ in April 1997 (revised General Permit) to replace the existing General Permit issued under Order No. 91-13-DWQ (as amended by Order No. 92-12-DWQ). This revised General Permit was issued to amend some of the provisions of the expired permit in accordance with federal regulations.

The revised General Permit issued under SWRCB Order No. 97-03-DWQ had waste discharge requirements (WDRs) for discharges of storm water associated with industrial activities. Industrial sites (Dischargers) covered under Order No. 97-03-DWQ must comply with the following requirements:

i. Submit a Notice of Intent (NOI) form;
ii. Prepare a revised SWPPP to comply with the General Permit;
iii. Develop and implement a revised storm water monitoring program; and
iv. Report storm water testing results and perform a comprehensive site compliance evaluation annually.

SWRCB adopted Order No. 2014-0057-DWQ, a new *General Permit for Storm Water Discharges Associated with Industrial Activities*, hereafter referred to as the Industrial General Permit (IGP), which supersedes Order No. 97-03-DWQ except for Order No. 97-03-DWQ's requirement to submit annual reports by July 1, 2015 and for enforcement purposes. Significant changes in the IGP include, but are not limited to:

i. Dischargers must implement a set of minimum best management practices (BMPs) in combination with any advanced BMPs necessary to reduce or prevent pollutants in industrial storm water discharges;
ii. Dischargers must submit and certify all reports electronically via the Storm Water Multiple Application and Report Tracking System (SMARTS);
iii. Appropriately trained personnel must implement the SWPPP;
iv. Additional parameters must be monitored if the facility contributes pollutants to receiving waters listed as impaired for those pollutants;
v. The definition of a Qualifying Storm Event (QSE) is a precipitation event that (a) produces a discharge for at least one drainage area; and (b) is preceded by 48 hours with no discharge from any drainage area;
vi. The sampling frequency was increased to require two (2) sampling events within the first half of each reporting year (July 1 to December 31) and two (2) sampling events within the second half of each reporting year (January 1 to June 30); and
vii. Light industry facility Dischargers excluded from coverage under the previous permit (Order 97-03-DWQ) must obtain the appropriate coverage under this IGP.

A copy of the IGP for Order No. 2014-0057-DWQ is enclosed in **Appendix A**, which went into effect on July 1, 2015. A copy of the NOI is included in **Appendix B**.

A.2. Site Information

AWTF is located approximately one mile south of the City of Avalon on the southeast end of Santa Catalina Island (**Figure 1**) at 123 Pebbly Beach Road. The AWTF is a Publicly Owned Treatment Works (POTW) owned by the City of Avalon and operated under contract by ES, previously doing business as Environ Strategy Consultants, Inc. The AWTF treats municipal wastewater that is a mixture of fresh and salt water sewerage from domestic and commercial sources. The Facility has an average dry weather design treatment capacity of 1.2 million gallons per day (mgd). Wastewater treatment at the AWTF consists of a rotating screen for removal of large particles, a roughing filter, and activated sludge reactors for removal of organics, clarifiers for separation of solids, and a chlorination system for disinfection. Solids separated at the rotating screens are sent to the Pebbly Beach Landfill, regulated separately by Order No. R4-2002-0058. Waste sludge from the activated sludge reactors is aerobically digested, dewatered in a centrifuge, then dried in sludge drying beds prior to being hauled to the Pebbly Beach Landfill. The secondary treated wastewater is discharged through the ocean outfall off Pebbly Beach, approximately half way between the AWTF and Avalon Bay. Other site operations include minor fleet vehicle and equipment maintenance, employee parking, and administrative and laboratory services.

Facility Name:	Avalon Wastewater Treatment Facility (AWTF)
Address:	123 Pebbly Beach Road Avalon, CA 90704
Site Contact:	Van Madding – Plant Manager
Telephone:	310-510-0731
Operator Name:	ES Engineering Services, L.L.C.
Owner Name:	City of Avalon
Owner Contact:	Denise Radde – City Manager
Telephone:	310-510-0220
Address:	Post Office Box 707 Avalon, CA 90704
Facility SIC Code(s):	4952 (Wastewater Treatment Systems)
Facility NAICS Code(s):	221320
WDID #:	4 19I023146

B. SWPPP IMPLEMENTATION AND REVISIONS

Per requirements under Order No. 2014-0057-DWQ, as of July 1, 2015, AWTF will:

i. Revise the on-site SWPPP whenever necessary;
ii. Certify and submit via SMARTS the SWPPP within 30 days whenever the SWPPP contains significant revision(s); and
iii. With the exception of significant revisions, AWTF is not required to certify and submit via SMARTS SWPPP revisions more than once every three (3) months in the reporting year after July 1, 2015.

SWPPP revisions are required:

i. If they are necessary to improve SWPPP consistency with any applicable municipal, state, and federal requirements that pertain to the requirements in the IGP;
ii. Whenever a Discharger's status changes due to an annual Numeric Action Level (NAL) exceedance (discussed in Section XII);
iii. If visual observation records indicate corrective actions and a SWPPP revision are necessary;
iv. If they are needed to address any physical or operational changes at the facility and/or changes to the existing BMPs;
v. If the Discharger is directed to revise the SWPPP by the SWRCB or Regional Water Quality Control Board (RWQCB); and
vi. If a Discharger is requesting a suspension of monitoring activities, due to suspension of industrial activities for ten (10) or more consecutive calendar days at a remote and/or unstaffed site.

Revisions to this SWPPP will be documented on the *SWPPP/MIP Revisions* form enclosed in **Appendix D**.

C. SWPPP PERFORMANCE STANDARDS

AWTF has ensured this SWPPP has been prepared to: (1) identify and evaluate all sources of pollutants that may affect the quality of industrial storm water discharges and authorized non-storm water discharges; (2) identify and describe the minimum BMPs and any advanced BMPs implemented to reduce or prevent pollutants in industrial storm water discharges and authorized non-storm water discharges; and (3) identify and describe conditions or circumstances which may require future revisions to be made to this SWPPP. This SWPPP has been prepared in accordance with all applicable SWPPP requirements and shall be made available upon request of a representative of the SWRCB or RWQCB (Water Boards) and/or local storm water management agency which receives the storm water discharges.

D. PLANNING AND ORGANIZATION

D.1. Pollution Prevention Team

The members of the AWTF Pollution Prevention Team (PPT) are listed in **Table 1**. The PPT is responsible for assisting with the implementation of the requirements of the IGP and includes personnel trained in the monitoring requirements of the IGP. The Plant Manager oversees the SWPPP and delegates responsibility to site staff to act as the PPT. The PPT includes additional team members who will conduct required monitoring tasks when the regularly assigned team members are temporarily unavailable.

D.2. Other Requirements and Additional Documentation

This SWPPP has been developed, implemented, and revised as necessary to be consistent with any applicable municipal, state, and federal requirements pertaining to the requirements in the IGP. The AWTF is also regulated under Waste Discharge Requirements (WDRs) Order No. R4-2013-0182, NPDES No. CA0054372 adopted by the Regional Water Quality Control Board 4 - Los Angeles Region (LARWQCB) on December 5, 2013. This Order expires on January 31, 2019. Order No. R4-2013-0182 is 150 pages and therefore, is not included as an attachment to this SWPPP. A copy of this Order is kept at the site.

Additional documentation for the Filtrexx® Soxx™ being used as a sediment control BMP at the site storm drains is provided in **Appendix C**.

Scheduled facility hours are defined as time periods when the facility is staffed to conduct any function related to industrial activity, but excluding time periods where only routine maintenance, emergency response, security, and/or janitorial services are performed. The scheduled facility operating hours for AWTF are 6:30 am to 3:30 pm Monday through Friday and as required on weekends.

E. SITE MAP

AWTF is approximately 2.6 acres in size. Approximately 84% of the site is surfaced in impervious materials. Structures account for approximately 30% of the site, while 54% is comprised of paved areas. Pervious areas on the site include landscaping 12% and 2% hard packed area under the piping and component storage area (**Figure 2**).

Site operations include activities associated with treatment of municipal wastewater that is a mixture of fresh and salt waters and sewerage. Rotating screen, roughing filters, clarifier, activated sludge reactor, and drying bed operations are conducted outdoors. Most maintenance fabrication, centrifuge operations and laboratory testing are conducted under covered, enclosed areas. The most prominent structures are the Centrifuge building, control room, maintenance shop, generator building, trickling filters, clarifiers, activated sludge reactors and mechanical rooms (**Figure 2**).

E.1. Storm Water Drainage Patterns & Sampling Locations

All storm water generated on the site and from the canyon slope along the northwest portion of the site ultimately drains northeast to a storm channel that leads to the Pacific Ocean. The flow directions are illustrated on **Figure 2**. Open ditches and culverts have been constructed along the northeast boundaries to reduce run-on from the adjacent hillside and guide flow along the perimeters of the property bounded by Pebbly Beach Road and the northeast hillside. A curb has been constructed around the higher ground to the storm water drainage system. Open ditches flow into culverts. Storm Drain A is located in the front of the facility, to the left of the front entry gate and discharges in a northeasterly direction along the perimeter of the facility via a culvert to the ditch leading to the discharge culvert under Pebbly Beach Road. Storm Drains B & C are located along the back of the treatment facility with Drain B located upstream from Drain C. Both convey storm water to the north towards the discharge culvert under Pebbly Beach Road into the storm channel.

Monitoring Point 1 (Drain A) is located just inside the entry gate on the left. Monitoring Point 2 (Drain C) is located at the rear of the facility and is a representative sample point for storm water discharge at both Drain B and C.

E.2. Drainage Estimate

An estimate of the drainage areas, in relation to total facility square footage, is presented below. **Figure 2** identifies the drainage areas, discharge locations, and sampling points.

Drainage Area	Runoff Source Areas and Discharge Locations	Approx. Area	% of Total Facility
Area 1	Receives runoff from the Centrifuge (Dewatering) building and surrounding areas discharge to the Northern ditch that connects to the culvert.	11,979 square feet	25%

Area 2	Receives runoff from the Waste Water treatment area, slope below the drying beds, driveway, and pipe storage areas that flow to Drains B & C.	47,916 square feet	50%
Area 3	Receives runoff from the area near the screens, maintenance shop, and employee parking area which flows to Drain A and then to the culvert to the north storm channel.	10,542 square feet	11%

F. LIST OF INDUSTRIAL MATERIALS

Table 2 lists the typical quantities and handling frequency of the industrial materials at AWTF, as well as where each material is stored, received, shipped, and handled. See **Figure 2** for the approximate locations of material storage areas.

G. POTENTIAL POLLUTANT SOURCES

G.1. Narrative Description of Potential Pollutant Sources

The following sections identify the processes, activities and material handling areas and list the significant materials that are handled and stored in each area at AWTF.

G.1.a. Industrial Processes

Industrial process areas that have been identified as potential source contributors to pollutants in storm water runoff include the paved areas surrounding the Aeration Tanks, Clarifiers, Aerobic Digesters, Chlorine Contact Tank, Decant Tank, Containment Area and Influent Screens. The Dewatering Building, Sludge Drying Beds, Shop, and traffic and parking areas may also contribute to pollutants in storm water. Pollutants inadvertently coming in contact with rainwater may affect pH and/or increase levels of total suspended solids (TSS) and oil and grease (O&G). The industrial processes and potential pollutants present in each area are described in detail below.

G.1.b. Material Handling and Storage Areas

The significant materials and their storage locations at the site are listed in **Table 2** and depicted on **Figure 2**. All hazardous fluids are stored inside or under cover with spill containment. Hazardous wastes generated at the AWTF are limited to used oil, rags, and waste absorbent. The used oil is stored in sealed 55-gallon steel drum located in a concrete spill containment curbed area. Used absorbent and rags are kept in dedicated containers. The only potential for contact with storm water runoff would be from tracking residues or in the unlikely event of a spill that was not contained. The site keeps absorbent materials and has spill prevention controls in place.

Treated sludge is spread and dried in the Sludge Drying Beds, which is a concrete containment area. Rain falling in this area is contained and not allowed to discharge.

G.1.c. Dust and Particulate Generating Activities

Vehicles entering the site or passing the site along Pebbly Beach Road may track or blow dirt and dust onto the paved areas adjacent to the road. The end of Pebbly Beach Road by the Dewatering Building is unpaved and is regularly used by large industrial trucks, which generate airborne dust. Some site operations such as welding or maintenance activities may also generate particulates. Welding is done inside the Shop, centrifuge or mechanical areas of the facility buildings. Industrial areas are periodically inspected and swept to reduce dust.

The native slopes surrounding the site on the northeast have some vegetation, but may also deposit dirt on the site during high winds or heavy rain events.

G.1.d. Significant Spills and Leaks

Spills and leaks may potentially occur in the following areas: headworks, rotating screens, paved areas, trash areas, aeration tanks, final clarifiers, chlorine contact tank, thickener tank, digester tanks, waste oil storage, materials handling and areas including: waste oil storage area, clarifier polymer area, centrifuge polymer area, and chlorine storage. Spill kits and spill response procedures are in place to ensure that no unauthorized non-storm water discharge will reach any discharge locations. There have been no spills or leaks in significant quantities from the facility's storm water conveyance system within the previous five-year period. In July 2010 a spill of raw sewage did reach the storm water conveyance system. Actions taken to prevent future spills include:

1. Overflow weirs were adjusted to redirect high flow levels into the plant grit chamber which would introduce the flow back into the process.
2. Standard Operating Procedures were implemented for both rotating screens to be online during all potential high flow situations.
3. An alarm system was installed on both rotating screens to notify operators of high flow conditions before an overflow exists.

There have been no toxic chemicals listed in 40 CFR Section 302 or oil and hazardous substances in excess of reportable quantities (40 CFR §§ 110, 117, and 302) discharged from the facility's storm water conveyance system within the previous five-year period. The location, characteristics, and approximate quantities of materials with a potential to spill or leak are listed in **Table 2**.

G.1.e. Non-Storm Water Discharges

AWTF has the following potential authorized Non-Storm Water Discharges (NSWDs): irrigation and air conditioning condensate. Authorized NSWDs do not generally discharge from the site. Air conditioning condensate is directed to planters located around the office and very little irrigation

is performed due to the drought. Secondary containment, spill kits, and spill response procedures are in place to ensure that no unauthorized NSWDs will discharge from the site.

G.1.f. Erodible Surfaces

Approximately, 14% of AWTF has permeable surfaces with potential to erode during heavy rain events. The native hillslope adjacent to the northwest site perimeter has some vegetation, but has the potential to erode during heavy rain events. AWTF has placed fiber rolls along the base of some of the slope to reduce erosion. The site may uses fiber rolls, rocks, and/or sand bags to help prevent erosion. The end of Pebbly Beach Road near the Dewatering Building is also unpaved and prone to erosion.

The site is paved except for a few unpaved landscaped areas along Pebbly Beach Road, which have established vegetation to prevent erosion.

G.2. Assessment of Potential Pollutant Sources

AWTF has identified potential areas of impact to storm water runoff and has implemented the best management practices listed in **Table 3**. The minimum and advanced BMPs are also discussed in more detail in Section X.H.

G.2.a. Narrative Assessments by Industrial Area

i. Headworks

The AWTF has two rotating screens for removal of large particles from the influent to the facility. The large particles are disposed of into bins which are eventually transported to the Avalon Landfill for ultimate disposal. Possible pollutants from the headworks at the treatment facility would consist of particles removed by the rotating screens being spilled and carried by runoff to the storm drain and/or wastewater, in the event of an overflow. Potential pollutants include increased concentrations of TSS due to particles removed from the process and wastewater.

ii. Aeration Tanks

AWTF has three aeration tanks which process wastewater and remove organics. The possible source of pollutants from these tanks would be wastewater, in the event of an overflow. TSS or pH affects are the main potential storm water pollutants in this area.

iii. Clarifier Polymer Area

The clarifier polymer for the AWTF is located in the rear of the facility, on the discharge channel side of the aeration basins, just before the intakes gates for the final clarifiers. The polymer is in 55 gallon drum containers. One drum of polymer is connected to an injection system which injects a mixture of polymer and plant water into the clarifier influent channel for better separation. Up to two additional full drums of polymer are stored next to the drum of polymer being used and are sitting on top of the channel grating. The likelihood of the polymer coming into contact with storm water runoff at the polymer injection and storage site for the clarifiers is medium to low. The injection polymer sits on top of a concrete slab alongside the clarifier

influent channel and if a spill occurs it should discharge into the channel. The polymer stored at this site is located over the channel grating and any spill from these containers will go directly into the wastewater process.

iv. Centrifuge Polymer Area

The centrifuge polymer area is located within the dewatering building on the Southeastern side of the facility. Four 55 gallon drums of polymer are being stored inside the building near the facility centrifuge. One drum of polymer is connected to the centrifuge polymer injection system. There is no likelihood that this polymer will come into contact with storm water. These drums are located within a building which has a drainage system that recycles back into the facility treatment process. All loading and unloading of the drums is conducted inside the building.

v. Final Clarifiers

The AWTF has three final clarifiers which separate solids from the plant effluent. The solids are returned to the aeration tanks and/or removed to the digester tanks. The final clarifiers have a polymer injection system upstream of the intake for enhancement in separation of solids from the effluent. The possible sources of pollutants from the clarifiers would be wastewater, in the event of an overflow and/or polymer leakage. TSS and pH affects are the potential pollutants.

vi. Chlorine Contact Tank and Chlorine Room

The AWTF has a chlorine contact tank where the effluent from the clarifiers is treated with chlorine for disinfection purposes before being discharged to the Pacific Ocean through an outfall. The possible sources of pollution would be chlorine and/or plant effluent, in the event of an overflow. The chlorine storage area is located within the Chlorine Room (**Figure 2**) between the Control Room and the outside chlorine contact chamber. Chlorine for disinfection purposes is stored inside the room and is used on a weekly basis to mix a dilute solution of chlorine/water in a 500 gallon storage tank, also located in the same room. The likelihood that any chlorine and/or the chlorine solution will come in contact with storm water is very low, because a drain is located on the ground in front of container, which drains directly back into the treatment process.

vii. Thickener Tank

The AWTF has a thickener gravity tank which is used to separate thickened waste sludge from the clarifiers by use of gravity and longer detention times. The water is returned to the activated sludge process for further treatment and the thickened sludge is sent to the digesters. The possible source of pollution would be wastewater, in the event of an overflow.

viii. Aerobic Digester Tanks

The AWTF has two aerobic digesters that digest activated sludge aerobically to a more stable product for disposal before being sent to a centrifuge for further dewatering. The possible source of pollutants from the digesters would be wastewater, in the event of an overflow.

ix. Sludge Drying Beds

The AWTF has a large concrete containment area protected by berms and containment walls. The beds are designed to collect leachate from the drying sludge and return it to the waste water

treatment area for further processing via multiple plumbed drains to the WWTP. Rain that falls within this area is contained and either evaporates or is sent back through the plant via the drains.

x. Paved Parking/Traffic Areas

The AWTF has paved areas surrounding all buildings and structures, which may be used for parking purposes. The possible sources of pollutants on the paved areas would be oily drips and dirt from parked vehicles and mobile equipment. The pavement is inspected and cleaned regularly using dry sweeping methods.

xi. The Shop

The Shop is a covered masonry building. Small amounts of chemicals and materials of concern are stored within flammable cabinets. Doors are closed when not receiving or moving materials in or out of the shop.

xii. Waste Oil Storage

The AWTF has a waste oil storage area where waste oil is put into a labeled 55-gallon drum for transport offsite to a licensed treatment facility using manifest documentation. The waste drum has an overpack and is located in a spill containment curbed area to contain runoff. The possible sources of pollutants from the waste oil containment area would be spills during the disposal process and/or leakage from the storage container or spill containment structure.

xiii. Trash Bin

The AWTF has one trash bin located in the front of the facility, next to the headworks. The trash bin has a lid which is kept closed at all times to prevent waste from escaping. All trash is contained within the bin. The possible source of pollutants from the trash bin would be litter from the container.

G.2.b. Minimum BMP Effectiveness

If the minimum BMPs described in subsection H.1 below do not adequately reduce or prevent pollutants in storm water discharges in compliance with Section V.A of the IGP, advanced BMPs are required.

Due to the site's proximity to native and disturbed soils, the minimum BMPs conducted at AWTF have not adequately reduced TSS in storm water discharges. Therefore, advanced BMPs have been implemented as described in Section X.H.2.

G.2.c. No Exposure Areas

The landscaping along Pebbly Beach Road and the Control Room have no exposure to industrial activities and materials in accordance with the definitions in Section XVII of the IGP.

G.2.d. Additional Parameters

Based upon the assessment above, AWTF does not propose to sample for additional parameters beyond the required parameters in Section XI.B.6 of the IGP.

H. BEST MANAGEMENT PRACTICES (BMPS)

H.1. Minimum BMPs

AWTF has implemented and will maintain the following minimum BMPs to reduce or prevent pollutants in industrial storm water discharges. These BMPs are summarized in **Table 3**.

H.1.a. Good Housekeeping

The following Good Housekeeping procedures are routinely practiced to reduce or prevent pollutants in storm water discharges from AWTF:

i. Outdoor industrial areas including storm water discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or storm water run-on are regularly observed to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials shall be cleaned and disposed of properly.
ii. Material tracking is minimized by paved areas.
iii. Dust generation is minimized from industrial activities by conducting welding and maintenance indoors.
iv. All wash and rinse waters flow back into the treatment system for treatment.
v. All stored industrial materials that can be readily mobilized by contact with storm water are kept inside or covered prior to rain, where possible.
vi. All stored non-solid industrial materials or wastes (e.g., particulates, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water will be contained.
vii. No rinse/wash waters or industrial materials will be disposed of in the storm water conveyance system.
viii. There are no storm water discharges from non-industrial areas that may contact industrial areas of the facility.
ix. Authorized non-storm water discharges from non-industrial areas, such as air conditioning condensate will be minimized or directed to landscaping to prevent contact with industrial areas of the facility.

H.1.b. Preventive Maintenance

The following preventive maintenance procedures are routinely practiced at AWTF:

i. All equipment and systems used outdoors that may spill or leak pollutants have been identified.
ii. The outdoor equipment and systems will be observed on a regular basis to detect leaks and to identify conditions that may result in the development of leaks.
iii. Equipment is serviced and maintained in accordance with manufacturer recommendations.
iv. Equipment and systems will be promptly repaired when conditions exist that may result in the development of spills or leaks.

H.1.c. Spill and Leak Prevention and Response

AWTF has established procedures and controls to minimize spills and leaks. Spills of hazardous materials will be handled in accordance with Federal, State, and Local Regulations. If required, a HAZMAT contractor will be retained. In the event of a spill, the appropriate supervisor or manager will be immediately notified and the following activities will be conducted:

i. Identify product and secure the area (if necessary);
ii. Obtain personal protective equipment and maintain safety of employees;
iii. Cover floor and storm drains and contain spilled material with portable dikes, absorbent socks, and/or other absorbent materials;
iv. Remove soiled absorbent, clean up material, and package it for disposal in accordance with environmental regulations;
v. Clean area to remove residues and prevent storm water contamination;
vi. Log the time, place, volume, reason for, and type of spill release in an incident report;
vii. Replace or clean any spill control equipment so that it will be ready for the next event; and
viii. The incident shall be reported to upper management. The appropriate manager(s) shall report to local enforcement agencies in accordance with Federal, State, and local regulatory requirements.

Spill and leak response materials and equipment shall be kept near designated chemical and maintenance fluid storage and dispensing areas. Spill and leak response equipment consists of absorbent materials, booms, shovels, rags, a Vactor vacuum truck, and a bobcat compact loader that is kept in the drying bed area. Absorbent is stored in the Shop. The spill and leak response equipment is replaced or refilled as necessary.

AWTF employees are routinely trained on proper material handling, spill prevention, and spill response.

H.1.d. Material Handling and Waste Management

The following material handling, storage, and waste management procedures are practiced at AWTF to minimize spills and prevent exposure of storm water to pollutants:

i. Handling of industrial materials or wastes that can be readily mobilized by contact with storm water during a storm event will be minimized as much as possible.
ii. All stored non-solid industrial materials or wastes (e.g., particulates, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water will be contained.
iii. Industrial waste disposal containers and industrial material storage containers that contain industrial materials will be covered when not in use.
iv. Run-on and storm water generated from within the facility will be diverted away from all stockpiled materials.
v. All spills of industrial materials or wastes that occur during handling will be cleaned in accordance with established spill response procedures (Section X.H.1.c).
vi. Any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes will be observed and cleaned as appropriate.

H.1.e. Erosion and Sediment Controls

The following procedures are practiced at AWTF to minimize erosion and sediment dispersion:

i. Wind erosion is somewhat prevented by vegetation on the native hill slopes, and the hills themselves that partially surround the site and act as a wind barrier.
ii. Stabilization of erodible areas prior to a forecasted storm event may be provided by fiber rolls, rocks, sandbags, and/or other materials.
iii. Erodible material tracking is somewhat minimized by paved areas. Areas of the site perimeter that are erodible are stabilized by vegetation.
iv. Run-on and storm water generated from within the facility will be diverted away from erodible materials as much as possible.
v. The AWTF does not have sediment basins.

Landscaped areas have drought resistant plants that do not require much watering. Excess runoff from air conditioners is directed to the landscaping. Potential runoff from potable water sources will be directed away from site areas where pollutants are likely to accumulate.

H.1.f. Employee Training Program

The AWTF Management will implement annual training schedules for employees performing compliance activities related to the IGP. AWTF has designated key employees to perform storm water management roles as the PPT. The AWTF PPT is described in **Table 1**. The PPT is trained to implement the requirements of the IGP, including but not limited to BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. Records of the training will be documented using the form in **Appendix D** of this SWPPP.

H.1.g. Quality Assurance and Record Keeping

The ongoing implementation of this SWPPP and the Monitoring Implementation Plan (MIP) is the responsibility of the PPT. ES has a qualified industrial storm water practitioner (QISP) to assist with review and updating the SWPPP and MIP, PPT training, and BMP implementation. AWTF will maintain the BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five years.

H.2. Advanced BMPs

In addition to the minimum BMPs described in Section H.1, the following advanced BMPs described below have been implemented in order to reduce or prevent discharges of pollutants in storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability at AWTF.

H.2.a. Exposure Minimization BMPs

Dewatering operations and equipment maintenance operations occur inside the Dewatering Building. Emergency power generator is within an enclosed building. Most maintenance, metal fabrication and chemical inventory are kept inside the Shop. Exposed materials that could pollute storm water will be covered or moved inside when rain is expected.

H.2.b. Storm Water Containment and Discharge Reduction BMPs

The Sludge Drying Bed concrete containment area acts as a storm water containment and discharge reduction area for any rain that falls within it. This storm water is not released. Similarly, all rain that falls in the aeration tanks, final clarifiers, aerobic digesters, roughening filter, screen and grit chamber, and sludge thickener areas joins the wastewater and is retained onsite and treated through the system.

Though it is not engineered storm water containment and discharge reduction, the pervious native slope areas around the perimeter of the site allow some natural infiltration to occur.

H.2.c. Other Advanced BMPs

AWTF has added fiber rolls and Filtrexx® Soxx™ or similar around Storm Drains A, B, and C to help reduce sediment in the storm water that enters these drains. Fiber rolls, sand bags, or other erosion control devices are also placed along the toe of some sections of the native hillslopes to prevent erosion and sediment being deposited on paved areas of the site during rain events.

H.3. Temporary Suspension of Industrial Activities

If AWTF plans to temporarily suspend industrial activities for ten or more consecutive calendar days during a reporting year, AWTF may also suspend monitoring if it is infeasible to conduct monitoring while industrial activities are suspended (e.g., the facility is not staffed, or the facility

is remote or inaccessible) and the facility has been stabilized. Seven calendar days prior to the planned temporary suspension of industrial activities, AWTF must upload via SMARTS:

i. SWPPP revisions specifically addressing the facility stabilization BMPs;
ii. Justification for why monitoring is infeasible at the facility during the period of temporary suspension of industrial activities;
iii. The date the facility is fully stabilized for temporary suspension of industrial activities; and
iv. The projected date that industrial activities will resume at the facility.

Upon resumption of industrial activities at the facility, AWTF will confirm and/or update the date the industrial activities were resumed via SMARTS and resume all IGP compliance activities.

AWTF does not plan on temporarily suspending industrial activities at this time.

H.4. BMP Descriptions

H.4.a. BMPs Conducted at AWTF

The site-specific BMPs conducted at AWTF are described in **Table 3**, and the previous Sections X.H.1 to X.H.3.

H.4.b. Minimum or Advanced BMPs Not Conducted at AWTF

All required minimum BMPs are conducted at AWTF, except item v. in Section X.H.1.e., since the AWTF does not have sediment basins.

H.4.c. BMPs Implemented in lieu of Minimum and/or Advanced BMPs

No BMPs are implemented in lieu of minimum or advanced BMPs at this time.

H.5. BMP Summary Table

The table summarizing the BMPs at AWTF is presented as **Table 3**.

H.6. Design Storm Standards for Treatment Control BMPs

The IGP lists design storm standards for treatment control BMPs installed after the effective date of Order No. 2014-0057-DWQ.

H.6.a. Volume-Based BMPs

Per the IGP, for volume-based BMPs, the minimum volume to be treated shall be calculated using one of the following methods:

i. The volume of runoff produced from an 85th percentile 24-hour storm event, as determined from local, historical rainfall records;

ii. The volume of runoff produced by the 85th percentile 24-hour storm event, determined as the maximized capture runoff volume for the facility, from the formula recommended in the Water Environment Federation's Manual of Practice; or,
iii. The volume of annual runoff required to achieve 80% or more treatment, determined in accordance with the methodology set forth in the latest edition of *California Stormwater Best Management Practices Handbook*, using local, historical rainfall records.

The AWTF does not have volume-based BMPs at this time.

H.6.b. Flow-Based BMPs

Per the IGP, for flow-based BMPs, the minimum flow to be treated shall be calculated using one of the following methods:

i. The maximum flow rate of runoff produced from a rainfall intensity of at least 0.2 inches per hour for each hour of a storm event;
ii. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from local historical rainfall records, multiplied by a factor of two; or,
iii. The maximum flow rate of runoff, as determined using local historical rainfall records, that achieves approximately the same reduction in total pollutant loads as would be achieved by treatment of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

The amount of storm water flow flowing to each of the Storm Drains A, B, and C was calculated using method i. above and the flow was less than the flow rates listed in the specifications for the Filtrexx® Soxx™ (**Appendix C**).

I. MONITORING IMPLEMENTATION PLAN

Per the IGP, the MIP must include the following items:

i. Team members assigned to conduct the monitoring requirements;
ii. A description of the following in accordance with Attachment H of the IGP:
    a. Discharge locations;
    b. Visual observation procedures; and
    c. Visual observation response procedures related to monthly visual observations and sampling event visual observations.
iii. Justifications for any of the following that are applicable to the facility:
    a. Alternative discharge locations in accordance with Section XI.C.3;
    b. Representative Sampling Reduction in accordance with Section XI.C.4; or
    c. Qualified Combined Samples in accordance with Section XI.C.5.
iv. Procedures for field instrument calibration, including manufacturer specified calibration intervals; and

v. An example Chain of Custody (COC) from used when handling and shipping water quality samples to the lab.

The AWTF MIP is described in detail in Section XI below.

XI) MONITORING IMPLEMENTATION PLAN

A. VISUAL OBSERVATIONS

Designated AWTF personnel (**Table 1**) will perform visual inspections using the forms enclosed in **Appendix E** of this SWPPP.

A.1. Monthly Visual Observations

At least once per calendar month, the designated AWTF employee will observe and document:

i. The presence or indications of prior, current, or potential unauthorized NSWDs and their sources in each drainage area;
ii. Authorized NSWDs and their sources in each drainage area; and
iii. Outdoor industrial equipment and storage areas, outdoor industrial activity areas, BMPs, and all other potential sources of industrial pollutants.

Authorized NSWDs may include potable water discharge from the operation, maintenance or testing of potable water sources, drinking fountains, irrigation drainage, landscape watering, and atmospheric condensates from refrigeration, air conditioning, and compressors. Clean NSWD is only authorized if monthly visual observations are performed, it does not violate local codes or Basin Plans, and BMPs are implemented to:

i. Reduce or prevent contact with materials or equipment that are potential sources of pollutants;
ii. Reduce the flow or volume of authorized NSWDs;
iii. Ensure that authorized NSWDs do not contain quantities of pollutants that cause or contribute to an exceedance of a water quality standard; and
iv. Reduce or prevent discharges of pollutants in authorized NSWDs in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.

Spill kits and spill prevention controls will be used to prevent any unauthorized non-storm water discharge from discharging from the site. These observations will include a description of corrective measures taken to eliminate the discharge. The BMPs may be revised and additional BMPs may be implemented if necessary.

The monthly visual observations shall be conducted during daylight hours of scheduled facility operating hours and **on days without precipitation**. If AWTF personnel do not complete monthly visual observations, an explanation will be provided in the Annual Report.

A.2. Sampling Event Visual Observations

The sampling event visual observations shall be conducted at the same time as sampling occurs at each discharge location, during scheduled facility operating hours and on a day preceded by 48 hours with no discharge from any drainage area. These observations and sampling events will be conducted within four hours of:

i. The start of the discharge; or
ii. The start of facility operations if the QSE occurs within the previous 12-hour period (e.g., for storms with discharges that begin during the night for facilities with day-time operating hours).

At each designated discharge location the AWTF employee will document the presence of any floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris, source(s) of any discharged pollutants in storm water discharges associated with industrial activities, and any corrective measures taken to prevent pollutant discharge.

In the event that a discharge location is not visually observed during the sampling event, or if there is no discharge from that location during the QSE, the AWTF employee will document which discharge locations were not observed during sampling or had no discharge.

A.3. Visual Observation Records

A binder will be maintained at AWTF and will include this SWPPP, MIP, and accompanying visual observation records. The binder will be available to regulatory agencies upon request.

Records of storm water monitoring information shall include:

i. Date, time, locations observed, presence and probable source of any observed pollutants;
ii. Name of individual(s) performing the sampling and monitoring; and
iii. Any response actions and/or additional SWPPP revisions necessary in response to the observations.

B. SAMPLING AND ANALYSIS

ES has prepared a site-specific storm water monitoring program for AWTF to maintain compliance with the IGP.

B.1. Qualifying Storm Event

A Qualifying Storm Event (QSE) is a precipitation event that produces a discharge from at least one drainage area and is preceded by 48 hours with no discharge from any drainage area.

B.2. Sample Collection

AWTF will collect and analyze samples from a minimum of two QSEs within the first half of each reporting year (July 1 to December 31) and a minimum of two QSEs within the second half of each reporting year (January 1 to June 30).

B.3. Compliance Group Participation

Compliance Group Participants are only required to collect and analyze one QSE within each half of each reporting year. AWTF is not participating in a Compliance Group at this time.

B.4. Representative Sampling

AWTF will collect samples from Storm Drain A and B, which are representative of storm water associated with industrial activities and any commingled NSWDs or associated with the discharge of contained storm water. The sample locations are shown on **Figure 2**.

B.5. Sample Collection

AWTF will collect the samples within four hours of:

i. The start of the discharge; or,
ii. The start of facility operations if the QSE occurs within the previous 12-hour period (e.g., for storms with discharges that begin during the night for facilities with day-time operating hours).

Sample collection is only required during scheduled facility operating hours and when sampling conditions are safe.

B.6. Analysis Parameters

Under the IGP, all facilities must sample and analyze for total suspended solids (TSS), oil and grease (O&G), and pH. Additional parameters may be required for the following reasons:

i. Additional parameters identified on a facility-specific basis that serve as indicators of the presence of all industrial pollutants identified in the pollutant source assessment;

Based on the facility-specific pollutant source assessment AWTF is not electing to sample for additional parameters at this time.

ii. Additional applicable parameters dependent upon the facility Standard Industrial Classification (SIC) code(s) listed in Table 1 of the IGP;

AWTF's SIC code is 4952, therefore, AWTF is not required to sample for the additional parameters due to the SIC code requirements.

iii. Additional applicable industrial parameters related to receiving waters with 303(d) listed impairments or approved TMDLs. Updated parameter lists for the 303(d) listed impaired water bodies can be found at the SWRCB's website;

AWTF's indirect receiving water is the Pacific Ocean near Pebbly Beach, which is not listed as an impaired waterbody on the 2012 version of the 303(d) list of impaired waters with TMDLs. However, according to SMARTS there are E. Coli and Enterococcus impairments in the Hydrologic Unit Code 10 (HUC 10) watershed that the AWTF is within. Both these parameters have a short holding time and due to the location of the AWTF on Catalina Island, it would not be possible to get the storm water samples to the analytical laboratory within the holding time to perform a

representative analysis. Since there are currently no NALs listed for E. Coli or Enterococcus in the IGP, the AWTF does not plan to analyze for these parameters at this time. Therefore, there are currently no additional parameters that AWTF is analyzing due to receiving water impairments.

iv. Additional parameters required by the Water Boards;

AWTF is also regulated under LARWQCB WDR Order No. R4-2013-0182, which requires the AWTF to sample and analyze an extensive list of analytical parameters in their treated wastewater discharge. The analysis and reporting for this permit is kept separate and is not included in this SWPPP.

v. Additional parameters specifically required by 40 CFR, Chapter I, Subchapter N – Effluent Guidelines and Standards.

AWTF is not subject to Subchapter N and therefore, is not required to sample for additional parameters due to Subchapter N requirements.

All of the required parameters, analytical test methods, and method detection limits that apply to AWTF are listed in **Table 4**. The bottle size, bottle type, preservatives used, analytical test methods and method detection limits may vary slightly depending on the laboratory.

B.7. Numeric Action Limits (NALs), Test Methods, and Reporting Units

AWTF has selected the appropriate NALs, test methods, and reporting units based on Table 2 of the IGP.

B.8. Storm Water Sample Collection and Handling Instructions

The members of the PPT responsible for storm water sample collection, preservation and handling of the storm water samples at AWTF are trained annually to ensure they are familiar with and follow the guidelines presented in Attachment H, *Storm Water Sample Collection and Handling Instructions*, of the IGP.

B.9. Qualified Combined Samples

If AWTF elects to analyze combined or composited samples from different discharge locations, the requirements of Section XI.C.5 below will be followed.

B.10. Laboratory Analyses

All analyses will be conducted at a laboratory certified through the Environmental Laboratory Accreditation Program by the California State Department of Public Health. AWTF will select the analytical laboratory and arrange the handling and transfer of the sample bottles to ensure all laboratory analyses are conducted according to test procedures under 40 CFR part 136, including the observation of holding times, unless other test procedures have been specified in the IGP or by the Water Boards.

B.11. Sampling Analysis Reporting

AWTF, will submit all sampling and analytical results for all individual or Qualified Combined Samples via SMARTS within 30 days of obtaining all results for each sampling event. When reporting the results on SMARTS, AWTF will provide the method detection limit when an analytical result from samples taken is reported by the laboratory as a non-detect or less than the method detection limit. For results reported by the laboratory as below the reporting limit but above the method detection limit, AWTF will provide the analytical result. Reported analytical results will be averaged automatically by SMARTS.

C. METHODS AND EXCEPTIONS

C.1. Sample Collection and Handling Instructions

All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater," as well as Attachment H of the IGP. All analyses will be conducted at a laboratory certified for such analyses through the Environmental Laboratory Accreditation Program by the California State Department of Public Health. AWTF will request the sample containers, container labels, and COC forms from the analytical laboratory. After collection, storm water samples will be placed in a cooler with ice and will be transported to the lab with a completed COC.

The COC shall include:

i. Site Name;
ii. Project Manager and contact information (can be a consultant);
iii. Sample location name(s);
iv. Date and time of sample collection;
v. Requested analysis;
vi. Requested turnaround time;
vii. Total number of containers;
viii. Name of individual performing sampling; and
ix. Signatures of persons relinquishing and receiving the samples.

An example of the COC form is included in **Appendix F**.

All monitoring instruments and equipment shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements.

C.2. pH Methods

AWTF is not subject to Subchapter N and has not entered Level 1 or 2 for pH, therefore, AWTF personnel may monitor pH using litmus papers or a calibrated pH meter.

C.3. Alternative Discharge Locations

At AWTF, there are no discharge locations that are either affected by storm water run-on from surrounding areas that cannot be controlled and/or are difficult to observe or sample.

C.4. Representative Sampling Reduction

The IGP allows dischargers to reduce the number of locations to be sampled in each drainage area (e.g., roofs with multiple downspouts, loading/unloading areas with multiple storm drains) if the industrial activities, BMPs, and physical characteristics (grade, surface materials, etc.) of the drainage area for each location to be sampled are substantially similar to one another.

To qualify for this reduction, the discharger must provide a Representative Sampling Reduction Justification, which must include:

i. Identification and description of each drainage area and corresponding discharge locations(s);
ii. A description of the industrial activities that occur throughout the drainage area;
iii. A description of the BMPs implemented in the drainage area;
iv. A description of the physical characteristics of the drainage area;
v. A rationale that demonstrates that the industrial activities and physical characteristics of the drainage area(s) are substantially similar; and
vi. An identification of the discharge location(s) selected for representative sampling, and rationale demonstrating that the selected location(s) to be sampled are representative of the discharge from the entire drainage area.

The discharger must satisfy the above requirements and submit and certify via SMARTS the justification. Once the justification is submitted and certified, the discharger may reduce the number of locations to be sampled in accordance with the justification. However, the RWQCB may reject the Representative Sampling Reduction Justification and/or request additional supporting documentation. If this occurs, the discharger will be ineligible for the Representative Sampling Reduction until the RWQCB approves the Representative Sampling Reduction Justification.

AWTF is not requesting Representative Sampling Reduction at this time.

C.5. Qualified Combined Samples

The IGP allows dischargers to authorize an analytical laboratory to combine samples of equal volume from as many as four discharge locations if the industrial activities, BMPs, and physical characteristics (grade, surface materials, etc.) within each of the drainage areas are substantially similar to one another. To qualify for combined sampling, the discharger must provide a Qualified Combined Samples Justification, which must include:

i. Identification and description of each drainage area and corresponding discharge locations;

ii. A description of the BMPs implemented in the drainage area;
iii. A description of the industrial activities that occur throughout the drainage area;
iv. A description of the physical characteristics of the drainage area; and
v. A rationale that demonstrates that the industrial activities and physical characteristics of the drainage area(s) are substantially similar.

The discharger must satisfy the above requirements and submit and certify via SMARTS the justification. Once the justification is submitted and certified, the discharger may authorize the laboratory to combine samples of equal volume from as many as four drainage areas in accordance with the justification. However, the RWQCB may reject the Qualified Combined Samples Justification and/or request additional supporting documentation. If this occurs, the discharger will be ineligible for the Qualified Combined Samples until the RWQCB approves the Qualified Combined Samples Justification.

At this time, AWTF has not filed a Qualified Combined Samples Justification and will not be combining samples.

C.6. Sample Collection and Visual Observation Exceptions

If AWTF is not able to conduct required visual observations or collect storm water samples due to dangerous weather conditions such as flooding or electrical storms, or storm water discharge outside scheduled facility operating hours, or because storm water discharges are not preceded by 48 hours without discharge, these exceptions shall be explained in the annual report. Sample collection is not required for drainage areas with no exposure to industrial activities and materials.

C.7. Sampling Frequency Reduction Certification

A Discharger may be eligible to reduce the number of QSEs sampled each reporting year if:

i. The results from four consecutive QSEs that were sampled did not exceed any NALs per Section XII.A. of the IGP;
ii. The Discharger is in full compliance with the requirements of the IGP and has updated, certified, and submitted via SMARTS all documents, data, and reports required by the IGP during the time period in which the samples were collected; and
iii. The Discharger certifies via SMARTS that it meets the above conditions.

However, the RWQCB may notify the Discharger that it may not reduce the number of QSEs sampled each reporting year if (1) the Sampling Frequency Reduction certification has been rejected; (2) additional supporting documentation must be submitted; or (3) the Discharger is subject to an enforcement action. Upon Sampling Frequency Reduction certification, the Discharger shall collect and analyze samples from one QSE within each half of each reporting year. If a subsequent NAL exceedance occurs, the Discharger will lose its Sampling Frequency Reduction certification.

At this time, AWTF is not eligible to collect a reduced number of samples.

D. FACILITIES SUBJECT TO FEDERAL STORM WATER EFFLUENT LIMITATION GUIDELINES (ELGS)

Dischargers with facilities subject to storm water ELGs per 40 CFR, Chapter I, Subchapter N must collect and analyze samples from QSEs for each regulated pollutant specified in the appropriate category in Subchapter N. AWTF is not subject to Subchapter N requirements.

XII) EXCEEDANCE RESPONSE ACTIONS (ERAS)

A. NALS AND NAL EXCEEDANCES

Analytical results from storm water sampling will be compared to the two types of NALs in **Table 4**, which lists the parameters AWTF is required to sample and the corresponding NALs provided in Table 2 of the IGP. The two types of NAL exceedances are annual average NAL exceedance and instantaneous maximum NAL exceedance, as described below.

A.1. Annual NAL Exceedance

SMARTS calculates the average concentration for each parameter using the results of all the sampling and analytical results for the entire facility for the reporting year (i.e. all "effluent" data). An annual NAL exceedance occurs when the average of the analytical results for a given parameter exceeds the annual NAL value for that parameter listed in **Table 4**. Dischargers using composite sampling or flow-weighted measurements shall calculate the average concentrations in accordance with the USEPA's NPDES Storm Water Sampling Guidance Document.

Due to the results of the storm water sampling conducted on May 6, 2016, an annual NAL exceedance of Total Suspended Solids (TSS) occurred.

A.2. Instantaneous Maximum NAL Exceedance

AWTF will compare all sampling and analytical results from each distinct sample to the corresponding instantaneous maximum NAL values in **Table 4**. An instantaneous maximum NAL exceedance occurs when two or more analytical results from samples collected within a reporting year exceed the instantaneous maximum NAL value for TSS or O&G or are outside of the instantaneous maximum NAL range for pH.

There have been no maximum NAL exceedances at AWTF.

B. BASELINE STATUS

At the beginning of a Discharger's NOI Coverage, all Dischargers have Baseline status for all parameters. AWTF currently has baseline status for pH, TSS, and oil & grease. TSS returned to baseline in the 2016-2017 reporting year due to four (4) consecutive QSEs which were below the

annual NAL and did not exceed the maximum NAL. In the 2017-2018 reporting year, there were either no Qualifying Storm Events (QSEs) that occurred at the Facility or there was insufficient stormwater to sample at AWTF during scheduled operating hours. Therefore, AWTF remains at baseline status for all parameters.

C. LEVEL 1 STATUS

AWTF's Baseline status for any given parameter will change to Level 1 status if sampling results indicate an NAL exceedance for that parameter. Level 1 status will commence on July 1 following the reporting year during which the exceedance(s) occurred.

TSS had entered Level 1 status due to sample results collected during the 2015-2016 reporting year. TSS returned back to baseline status during the 2016-2017 reporting year due to four (4) consecutive samples from QSEs which were below the annual NAL and did not exceed the maximum NAL.

C.1. Level 1 ERA Evaluation

Following commencement of Level 1 status for TSS for the reporting year 2015-2016, AWTF completed an Evaluation, with the assistance of a Qualified Industrial Storm water Practitioner (QISP) on September 28, 2016. The Level 1 Exceedance Response Action (ERA) Evaluation evaluated the industrial pollutant sources at the facility that are or may be related to the NAL exceedances. The QISP and AWTF management identified the corresponding BMPs in the SWPPP and evaluated additional BMPs necessary to prevent future NAL exceedances and to comply with the requirements of the IGP. AWTF staff and the QISP evaluated all drainage areas.

C.2. Level 1 ERA Report

AWTF's Level 1 status for a parameter will return to Baseline status once a Level 1 ERA Report has been completed, all identified additional BMPs have been implemented, and results from four consecutive QSEs that were sampled subsequent to BMP implementation indicate no additional NAL exceedances for that parameter.

Based upon the above evaluation, AWTF revised this SWPPP to include the additional BMPs identified in the Level 1 ERA evaluation. The Level 1 ERA Report containing a summary of the Level 1 ERA Evaluation and a detailed description of the SWPPP revisions, and the implementation information for the additional BMPs for each parameter that exceeded an NAL was prepared by a QISP on December 30, 2016. AWTF's LRP certified and submitted the Level 1 ERA Report in SMARTS, which included the QISP's identification number, name, and contact information.

C.3. NAL Exceedances Prior to Implementation of Level 1 Status BMPs

Prior to the implementation of an additional BMP identified in the Level 1 ERA Evaluation or October 1, whichever comes first, sampling results for any parameter(s) being addressed by that

additional BMP will not be included in the calculations of annual average or instantaneous NAL exceedances in SMARTS.

D. LEVEL 2 STATUS

AWTF's Level 1 status for a parameter will change to Level 2 status if sampling results indicate an NAL exceedance for a parameter while AWTF is in Level 1 status. Level 2 status will commence on July 1 following the reporting year if an NAL exceedance occurs.

No parameters have entered Level 2 status.

D.1. Level 2 ERA Action Plan

Dischargers with Level 2 status are required to certify and submit via SMARTS a Level 2 ERA Action Plan prepared by a QISP addressing each new Level 2 NAL exceedance by January 1 following the reporting year during which the NAL exceedance(s) occurred. For each new Level 2 NAL exceedance, the Level 2 Action Plan will identify which of the demonstrations described below AWTF has selected to perform. A new Level 2 NAL exceedance is any Level 2 NAL exceedance for a new parameter in any drainage area or the same parameter that is being addressed in an existing Level 2 ERA Action Plan in a different drainage area.

AWTF will implement all elements of the Level 2 ERA Action Plan as soon as practicable and complete all elements no later than 1 year after submitting the Level 2 ERA Action Plan. The Level 2 ERA Action Plan shall include a schedule and a detailed description of the tasks required to complete the AWTF's selected demonstration(s) as described below.

D.2. Level 2 ERA Technical Report

On January 1 of the reporting year following the submittal of the Level 2 ERA Action Plan, AWTF will certify and submit a Level 2 ERA Technical Report prepared by a QISP that includes one or more of the following demonstrations:

D.2.a. Industrial Activity BMPs Demonstration

An Industrial Activity BMP Demonstration shall include the following, as applicable:

i. A description of the industrial pollutant sources and corresponding industrial pollutants that are or may be related to the NAL exceedances;
ii. An evaluation of all pollutant sources associated with industrial activity that are or may be related to the NAL exceedance(s);
iii. A description and analysis of all implemented BMPs expected to achieve compliance with the effluent limitations of the IGP and are expected to eliminate future NAL exceedance(s);
iv. If the implemented BMPs are expected to achieve compliance with the effluent limitations of the IGP but are not expected to eliminate future NAL exceedance(s), AWTF

will provide an evaluation of any additional BMPs that would reduce or prevent NAL exceedances, the estimated costs of the additional BMPs, and an analysis describing the basis for the selection of BMPs implemented in lieu of the additional BMPs evaluated but not implemented; and,

v. Although any additional Level 2 ERA Action Plan BMPs may be implemented for all drainage areas, the description and analysis of the implemented BMPs shall specifically address the drainage areas where the NAL exceedance(s) responsible for AWTF's Level 2 status occurred;

vi. If an alternative design storm standard for treatment control BMPs in lieu of the design storm standard specified in the IGP will achieve compliance with the effluent limitations of the IGP, AWTF will provide an analysis describing the basis for the selection of the alternative design storm standard.

D.2.b. Non-Industrial Pollutant Source Demonstration

A Non-Industrial Pollutant Source Demonstration shall include the following, as applicable:

i. A statement that AWTF has determined that the exceedance of the NAL is attributable solely to the presence of non-industrial pollutant sources. If the pollutant may also be present due to industrial activities, AWTF will demonstrate that the pollutant contribution from the industrial activities by itself does not result in an NAL exceedance. AWTF will identify the sources as either run-on from adjacent properties, aerial deposition from man-made sources, or as generated by on-site non-industrial sources;

ii. A statement that AWTF has identified and evaluated all potential pollutant sources that may have commingled with storm water associated with AWTF's industrial activity and may be contributing to the NAL exceedance;

iii. A description of any on-site industrial pollutant sources and corresponding industrial pollutants that are contributing to the NAL exceedance;

iv. An assessment of the relative contributions of the pollutant from storm water run-on to the facility from adjacent properties or non-industrial portions of AWTF's property or from aerial deposition and the storm water associated with AWTF's industrial activity;

v. A summary of all existing BMPs for that parameter; and,

vi. An evaluation of all on-site/off-site analytical monitoring data demonstrating that the NAL exceedance(s) are caused by pollutants in storm water run-on to the facility from adjacent properties, or pollutants from non-industrial portions of AWTF's property, or from aerial deposition.

D.2.c. Natural Background Pollutant Source Demonstration

A Natural Background Pollutant Source Demonstration shall include the following, as applicable:

i. A statement that AWTF has determined that the NAL exceedance is attributable solely to the presence of the pollutant in the natural background that has not been disturbed by

industrial activities. If the pollutant is also present due to industrial activities, AWTF will demonstrate that the pollutant contribution from the industrial activities by itself does not result in an NAL exceedance;

ii. A summary of all data previously collected by AWTF, or other identified data collectors, that describes the levels of natural background pollutants in the storm water discharge;

iii. A summary of any research and published literature that relates the pollutants evaluated at the facility as part of the Natural Background Source Demonstration;

iv. A map showing the reference site location in relation to AWTF along with available land cover information;

v. Reference site and test site elevation;

vi. Available geology and soil information for reference and test sites;

vii. Photographs showing vegetation;

viii. Site reconnaissance survey data regarding the presence of roads, outfalls, or other human-made structures; and,

ix. Records from relevant state or federal agencies indicating no known mining, forestry, or other human activities upstream of the proposed reference site.

D.3. Level 2 ERA Technical Report Submittal

AWTF will certify and submit via SMARTS the Level 2 ERA Technical Report described above, as applicable. The Water Boards may review the submitted Level 2 ERA Technical Reports. Upon review, the Water Boards may reject the Level 2 ERA Technical Report and direct AWTF to take further action(s) to comply with the IGP.

Dischargers with Level 2 status who have previously submitted a Level 2 ERA Technical Report are required to provide certification in the subsequent Annual Report if there have been no changes warranting re-submittal of the Level 2 ERA Technical Report. Otherwise, the Discharger shall certify and submit via SMARTS an updated Level 2 ERA Technical Report prepared by a QISP with each Annual Report. The annual Level 2 ERA Technical Report update is based upon additional NAL exceedances of the same parameter and same drainage area, (if the original Level 2 ERA Technical Report contained an Industrial Activity BMP Demonstration and the implemented BMPs were expected to eliminate future NAL exceedances) and should include facility operational changes, pollutant source(s) changes, and/or information that becomes available via compliance activities such as monthly visual observations, sampling results, annual evaluations, etc.

If AWTF chooses to submit a Level 2 ERA Action Plan or ERA Technical Report prior to entering Level 2 status, AWTF will automatically be placed in Level 2 in accordance to the Level 2 ERA schedule.

No parameters have entered Level 2 status at this time.

D.4. Eligibility for Returning to Baseline Status

Dischargers with Level 2 status who submit an Industrial Activity BMPs Demonstration and have implemented BMPs to prevent future NAL exceedance(s) for the Level 2 parameter(s) shall return to baseline status for that parameter, if results from four subsequent consecutive QSEs sampled indicate no additional NAL exceedance(s) for that parameter(s). If future NAL exceedances occur for the same parameter(s), the Discharger's Baseline status will return to Level 2 status on July 1 in the subsequent reporting year during which the NAL exceedance(s) occurred.

AWTF will be ineligible to return to baseline status if AWTF submits any of the following:

i. An Industrial Activity BMP Demonstration in accordance with Section D.2.a.iv. of the IGP;
ii. A non-industrial pollutant source demonstration; or
iii. A natural background pollutant source demonstration.

D.5. Level 2 ERA Implementation Extension

If AWTF needs additional time to submit the Level 2 ERA Technical Report, a single time extension for up to six months will be granted upon submitting the following items into SMARTS, as applicable:

i. Reasons for the time extension;
ii. A revised Level 2 ERA Action Plan including a schedule and a detailed description of the necessary tasks still to be performed to complete the Level 2 ERA Technical Report; and,
iii. A description of any additional temporary BMPs that will be implemented while permanent BMPs are being constructed.

The RWQCB will review Level 2 ERA Implementation Extensions for completeness and adequacy. Requests for extensions that total more than six months are not granted unless approved in writing by the RWQCB. The RWQCB may reject or revise the time allowed to complete Level 2 ERA Implementation Extensions, identify additional tasks necessary to complete the Level 2 ERA Technical Report, and/or require AWTF to implement additional temporary BMPs.

XIII) INACTIVE MINING OPERATION CERTIFICATION

There are no inactive mining operations at AWTF.

XIV) COMPLIANCE GROUPS AND COMPLIANCE GROUP LEADERS

A. COMPLIANCE GROUP QUALIFICATION REQUIREMENTS

Any group of Dischargers of the same industry type or any QISP representing Dischargers of the same industry type may form a Compliance Group. A Compliance Group shall consist of

Dischargers that operate facilities with similar types of industrial activities, pollutant sources, and pollutant characteristics. AWTF is not participating in a Compliance Group at this time.

XV) ANNUAL COMPREHENSIVE FACILITY COMPLIANCE EVALUATION (ANNUAL EVALUATION)

AWTF will conduct one Annual Evaluation for each reporting year (July 1 to June 30). If AWTF conducts an Annual Evaluation fewer than eight months, or more than sixteen months, after conducting the previous Annual Evaluation, AWTF will document the justification for doing so. AWTF will revise the SWPPP, as appropriate, and implement the revisions within 90 days of the Annual Evaluation. At a minimum, Annual Evaluation will consist of:

i. A review of all sampling, visual observation, and inspection records conducted during the previous reporting year;
ii. An inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the storm water conveyance system;
iii. An inspection of all drainage areas previously identified as having no exposure to industrial activities and materials in accordance with the definitions in Section XVII of the IGP;
iv. An inspection of equipment needed to implement the BMPs;
v. An inspection of any BMPs;
vi. A review and effectiveness assessment of all BMPs for each area of industrial activity and associated potential pollutant sources to determine if the BMPs are properly designed, implemented, and are effective in reducing and preventing pollutants in industrial storm water discharges and authorized NSWDs; and,
vii. An assessment of any other factors needed to comply with the requirements in Section XVI.B of the IGP.

A sample *Annual Comprehensive Compliance Inspection* form is enclosed in **Appendix E**.

XVI) ANNUAL REPORT

AWTF will certify and submit via SMARTS an Annual Report no later than July 15th following each reporting year using the standardized format and checklists in SMARTS.

The following information will be included in the Annual Report:

i. A Compliance Checklist that indicates whether AWTF complies with and has addressed all applicable requirements of the IGP;

ii. An explanation for any non-compliance of requirements within the reporting year, as indicated in the Compliance Checklist;
iii. An identification, including page numbers and/or sections, of all revisions made to the SWPPP within the reporting year; and,
iv. The date(s) of the Annual Evaluation.

FIGURES